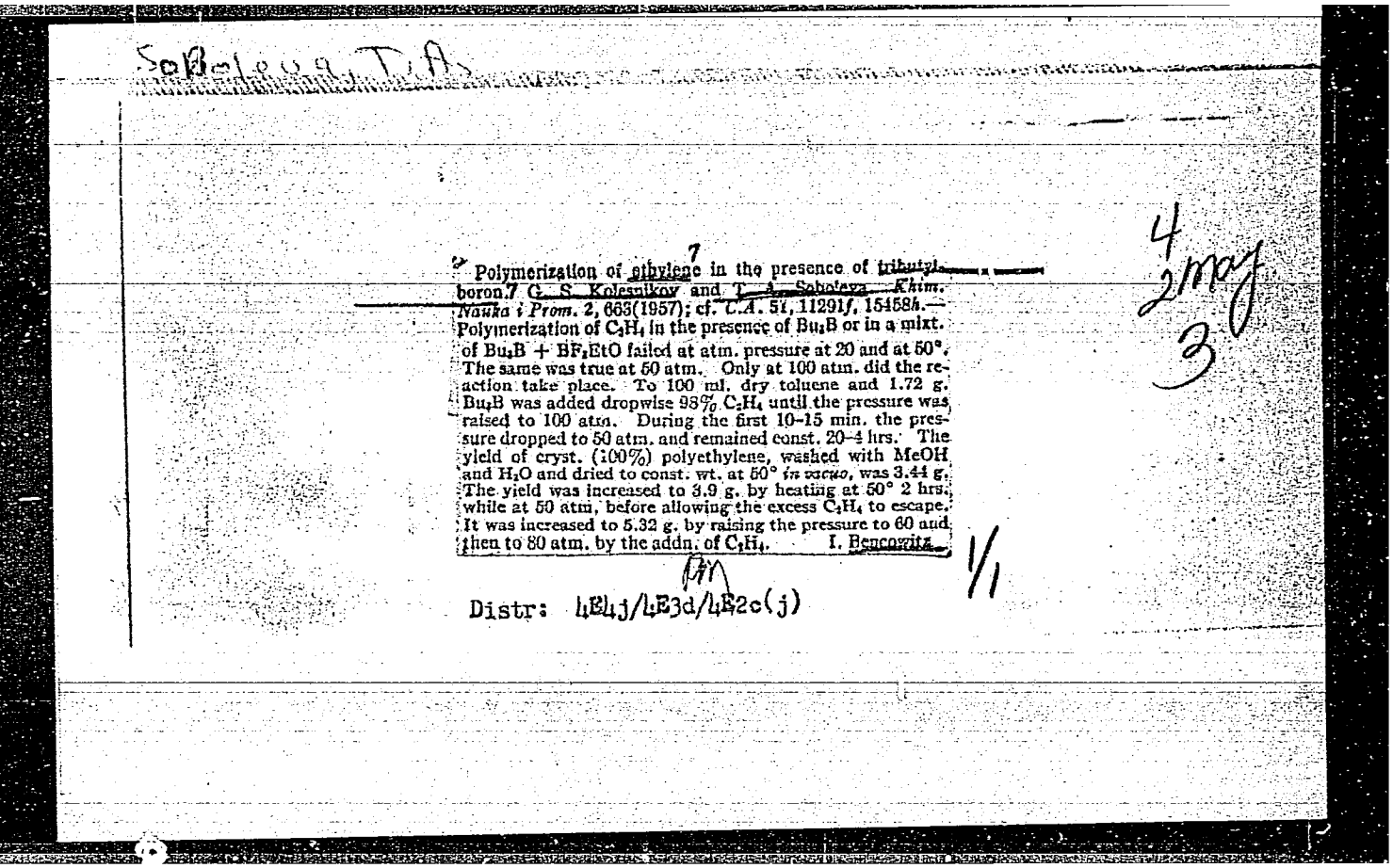
KOLESNIKOV, G.S.; KORSHAK, V.V.; SOBOLEVA, T.A.

High molecular weight compounds. Part 84. Polycondensation of 1,2-dichloroethane with toluene. Izv.AN SSSR Otd.khim.nauk 86 no.6:1095-1099 My '55. (MLRA 9:4)

1.Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR.
(Ethane) (Toluene)



Sobolewa, T. A.

4
2 May
3

Polymerization of ethylene in the presence of tributylboron. G. S. Kolesnikov and T. A. Sobolevа. *Khim. Nauka i Prom.* 2, 663(1957); cf. *C.A.* 51, 11291*f*, 15458*h*.—Polymerization of C_2H_4 in the presence of Bu_3B or in a mixt. of Bu_3B + BF_3EtO failed at atm. pressure at 20 and at 50°. The same was true at 50 atm. Only at 100 atm. did the reaction take place. To 100 ml. dry toluene and 1.72 g. Bu_3B was added dropwise 98% C_2H_4 until the pressure was raised to 100 atm. During the first 10–15 min. the pressure dropped to 50 atm. and remained const. 20–4 hrs. The yield of cryst. (100%) polyethylene, washed with MeOH and H_2O and dried to const. wt. at 50° *in vacuo*, was 3.44 g. The yield was increased to 3.9 g. by heating at 50° 2 hrs. while at 50 atm. before allowing the excess C_2H_4 to escape. It was increased to 5.32 g. by raising the pressure to 60 and then to 80 atm. by the addn. of C_2H_4. I. Bencowitz

1/1

Distr: 4E4j/4E3d/4E2c(j)

Soboleva, T. A.

62-2-24/28

AUTHORS: Kolesnikov, G. S., Soboleva, T. A.,

TITLE: The Synthesis of the Copolymers of Ethylene (Sintez sopolimerov etilena)

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1958, Nr 2, pp. 242-243 (USSR)

ABSTRACT: It was already shown in earlier papers that ethylene is synthesized in the presence of tributylboron under a pressure of more than 50 at. excess pressure. It was also already found that tributylboron may serve as a catalyst in the polymerization of acrylnitryl, styrene and methylmetacrylate. In connection with these determinations it was of interest ot determine the possibility of a synthesis with the above-mentioned unsaturated compounds (with the use of tributylboron as a polymerization catalyst). The experiment showed that copolymers of ethylene could be obtained with styrene, methylmetacrylate, acrylnitryl and vinylacetate in the performance of the reactions in toluene in the presence of tributylboron as catalyst of polymerization. (See table) There are 1 table, and 3 Slavic references.

Card 1/2

AUTHORS: Kolesnikov, G. S., Soboleva, T. A. 07/62-58-6-17/37

TITLE: Carbochain Polymers and Copolymers (Karbotsepnyye polimery i sopolimery) Communication 4. Synthesis and Polymerization of the Methyl Ether of 4-Vinyl Benzoic Acid (Soobshcheniye 4. Sintez i polimerizatsiya metilovogo efira 4-vinilbenzoynoy kisloty)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 6, pp. 760 - 762 (USSR)

ABSTRACT: The present paper is a continuation of investigations carried out in the field of the synthesis and polymerization of styrol derivatives which contain substituents in the aromatic core. This paper aims at bringing about the synthetization of methyl-4--vinylbenzoates, and in this connection the influence exercised by the introduction of the ester group into the styrol molecule upon the vitrification temperature of the polymer was to be explained. The synthesis of methyl-4-dibromobenzoate was carried out according to the scheme: 1,4-dibromobenzol-(4-bromophenyl)-methylcarbinol-(4-phenol cyanide)-methylcarbinol-4-vinylbenzoate. The polymer and the co-polymer (of the synthetized

Card 1/2

Carbochain Polymers and Copolymers. Communication 4. [illegible] 62-58-6-17/37
Synthesis and Polymerization of the Methyl Ether of 4-Vinyl Benzoic Acid

ester) was obtained with methylmetacrylate, and the vitrification temperatures of the polymer and co-polymer were determined. There are 3 references, 2 of which are Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental-organic Compounds AS USSR)

SUBMITTED: December 7, 1956

1. Methyl ethers--Synthesis 2. Methyl ethers--Polymerization
3. Acrylic resins--Applications

Card 2/2

KOLESNIKOV, G.S.; SUPRUN, A.P.; SOBOLEVA, T.A.

Carbon chain polymers and copolymers. Part 14: Copolymerization of ethylene with unsaturated compounds in the presence of boron alkyl compounds. Vysokom.soed. 1 no.4:627-634 Ap '59. (MIRA 12:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Boron compounds) (Ethylene) (Polymerization)

81587
S/190/60/002/03/11/011
B020/B066

5.3831

AUTHORS: Kolesnikov, G. S., Suprun, A. P., Soboleva, T. A., Plate, A. F., Slonimskiy, G. L., Pryanishnikova, M. A., Tarasova, G. A.

TITLE: Polymers and Copolymers With Carbon Chains. XXI. Copolymers on the Basis of Bicyclo (2,2,1) Heptadiene-2,5 and 1,2,3,4,7,7-Hexachloro Bicyclo (2,2,1) Heptadiene-2,5

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 3, pp. 451-455

TEXT: The authors attempted the polymerization of dissolved bicycloheptadiene and hexachloro bicycloheptadiene in the presence of BF_3 and the polymerization of hexachloro bicycloheptadiene in the presence of benzoyl peroxide, tert-butyl peroxide, azoisobutyric acid dinitrile, tri-n-propyl boron, and $TiCl_4$. Hexachloro bicycloheptadiene does not form polymers (Ref. 4). Bicycloheptadiene (Ref. 5) forms polymers in methylene chloride in the presence of BF_3 (at -70°, 4 hours) in a 75% yield. The copolymerization of bicycloheptadiene with hexachloro

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S/190/60/002/03/11/014
B020/B066

Polymers and Copolymers With Carbon Chains. XXI. Copolymers on the Basis of Bicyclo (2,2,1) Heptadiene-2,5 and 1,2,3,4,7,7--Hexachloro Bicyclo (2,2,1) Heptadiene-2,5

bicyclopentadiene and other monomers (styrene, vinyl acetate, methyl methacrylate) was studied to clarify the influence of the copolymer composition upon their solubility and thermodynamic properties. The authors synthesized copolymers from equimolecular quantities of dissolved bicycloheptadiene and hexachloro bicycloheptadiene in the presence of BF_3 (2 mole%) and in bulk in the presence of benzoyl peroxide and tri-n-propyl boron (0.5 mole%). The results obtained are given in Table 1. The curves of the thermodynamic properties of the copolymers of bicycloheptadiene and hexachloro bicycloheptadiene are presented in Fig. 1. According to an X-ray structural analysis, the resultant copolymers are amorphous. The properties of copolymers from equimolecular quantities of bicycloheptadiene and styrene are also given (Table 2). The results of the copolymerization of equimolecular quantities of bicycloheptadiene with methyl methacrylate in bulk in the presence of azoisobutyric acid dinitrile, benzoyl peroxide, and tert-butyl peroxide showed that the activity of methyl methacrylate

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S/190/60/002/03/11/014
B020/B066

Polymers and Copolymers With Carbon Chains. XXI. Copolymers on the Basis of Bicyclo (2,2,1) Heptadiene-2,5 and 1,2,3,4,7,7--Hexachloro Bicyclo (2,2,1) Heptadiene-2,5

is much higher than that of bicycloheptadiene. The copolymers obtained contain a total of about 1 per cent of bicycloheptadiene links, which is not sufficient for an increase of the thermal stability of polymethyl methacrylate. The curves of the thermodynamic properties of the copolymers of bicycloheptadiene and styrene, as well as of bicycloheptadiene and vinyl acetate are given in Fig. 2. The latter copolymer was synthesized for the first time. The copolymers of bicycloheptadiene and hexachloro bicycloheptadiene with a molar ratio of 70.5 : 29.5 are well soluble in dichloro ethane and toluene, and are highly elastic at elevated temperatures (250 - 350°). The copolymer of bicycloheptadiene and vinyl acetate is also highly elastic in a wide temperature range (60 - 350°). There are 2 figures, 2 tables, and 6 references: 3 Soviet, 2 US, and 1 British.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy (Institute of Elemental-organic Compounds). Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR (Institute of Organic

Card 3/4

Polymers and Copolymers With Carbon Chains. XXI. Copolymers on the Basis of Bicyclo (2,2,1) Heptadiene-2,5 and 1,2,3,4,7,7- -Hexachloro Bicyclo (2,2,1) Heptadiene-2,5

81587
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B020/B066

Chemistry imeni N. D. Zelinskiy AS USSR)

SUBMITTED: December 30, 1959

Card 4/4

KOLESNIKOV, G.S.; SUPRUN, A.P.; SOBOLEVA, T.A.; YERSHOVA, V.A.

Carbochain polymers and copolymers. Part 26: Polymerization and copolymerization of 1,1,2-trichloro-1,3-butadiene. Vysokom. soed. 2 no.8:1266-1269 Ag '60. (MIRA 13:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Butadiene) (Polymerization)

S/153/61/004/002/001/003
E111/E552

AUTHOR: Soboleva, T. A.

TITLE: Selective Reaction for Thorium and Cerium Ions

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy SSSR, Khimiya i khimicheskaya tekhnologiya, 1961, No.2, Vol.4, pp. 183-185

TEXT: According to V. I. Kuznetsov (Ref.1: Zh.obshchey khimii, 14, 914 (1944); Ref.2: Zh. analit. khimii, 14, 7 (1959)), the reaction of thorium with thoron is interfered with by many ions. In the method described, separation from interfering cations involved in the normal qualitative-analysis scheme and also WO_2^{2+}, Li^+, Be^{2+}, TiO^{2+} and ZrO^{2+} is achieved by using the ability of thorium to form difficultly-soluble double sulphates, specifically with potassium sulphate. Cerium is separated in the same way and detected by reaction with benzidine (Ref.5: F. Feigl. Öesterr.Chem.Ztg., 22, 124, 1919). All ions interfering with this reaction too are removed by the treatment with potassium sulphate. The procedure is as follows: 2.0 ml of the test solution are saturated with potassium sulphate and boiled for

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1-2 min with agitation. The precipitate is immediately filtered, washed three to four times with hot saturated potassium-sulphate solution and then treated on the filter with 1-2 ml of 2N hydrochloric acid, the solution being collected and tested for cerium and thorium. To detect cerium a drop of the solution is placed on filter paper, the spot is moistened with 2N sodium hydroxide solution and gently warmed over a flame. A drop of acetic-acid solution of benzidine applied to the spot gives an intense blue colour if cerium is present. To test for thorium 2-3 drops of 0.1% aqueous thoron solution are added to 1.0 ml of the solution: if thorium is present a red-crimson colour is produced, not dispersed by addition of 3-4 drops of 2N hydrochloric acid. A blank experiment should be carried out with 1.0 ml of water, to which 5 drops of 2N hydrochloric acid and 2-3 drops of thoron are added. The thoron reaction can also be effected on filter paper (1 drop of solution, 1 drop of thoron solution give a pink spot, not dispersed by 1 drop 2N hydrochloric acid, if thorium is present). The method enables concentration of thorium and cerium down to 0.11 mg and 33 γ/ml,

SOBOLEVA, T.A.

Qualitative detection reaction for beryllium. Izv.vys.ucheb. zav.;khim.i khim.tekh. 4 no.3:364-365 '61. (MIRA 14:10)

1. Ural'skiy politekhnicheskiy institut imeni Korova, kafedra fiziko-khimicheskikh metodov analiza.
(Beryllium--Analysis)

SOBOLEVA, T.A.; SUSLOV, A.P.; DAVLETSHIN, A.A.

Fractional reaction for the lithium ion. Trudy Uralpolitekh.inst. no.121:67-70 '62. (MIRA 16:5)

(Lithium--Analysis)

SOBOLEVA, T.A.; SUSLOV, A.P.; SAPOGOV, N.V.

Fractional reaction for thorium and uranium ions. Trudy Ural.politekh. inst.no.121[71]-75 '62.

(MIRA 16:5)

(Thorium--Analysis) (Uranium--Analysis)

37842
S/190/62/004/005/019/026
B110/B108

AUTHORS: Kolesnikov, G. S., Suprun, A. P., Soboleva, T. A., Yershova, V. A., Bondarev, V. B.

TITLE: Carbochain polymers and copolymers. XXXIX. Copolymerization of 1,1,2-trichlorobuta-1,3-diene with other unsaturated compounds

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 5, 1962, 743-748

TEXT: Determinations were made of the relative activities of 1,1,2-trichlorobuta-1,3-diene and styrene (10:90; 25:75; 50:50; 75:25; and 90:10) and of the composition of their copolymers at low degrees of conversion (5 - 7%). On the basis of the relative activities $r_1 = 0.07 \pm 0.03$ (styrene) and $r_2 = 1.18 \pm 0.08$ (trichlorobutadiene), the composition of the copolymer was plotted versus the composition of the monomer mixture. In order to raise the softening point (~50°C) of polytrichlorobutadiene, 1,1,2-tri-

Card 1/3

Carbochain polymers and copolymers...

chlorobuta-1,3-diene was copolymerized with acrylonitrile, vinyl chloride, and bicyclo-(2,2,1)-hepta-2,5-diene. During bulk copolymerization with acrylonitrile at a ratio of 50:50, only 10 mole% of acrylonitrile radicals was added to the copolymer. Thereupon, copolymerization was also carried out in a water-oil emulsion (1.8:1) with mersolate as an emulsifier, and benzoyl peroxide and ammonium persulfate as initiators. With the use of ammonium persulfate, only trichlorobutadiene homopolymers could be obtained from mixtures of 10 - 80 mole% of trichlorobutadiene and benzoyl peroxide. With acrylonitrile radicals of less than 40 mole%, the copolymer was completely soluble in toluene, while with more than 40 mole%, it was only partially soluble. Extraction of a partially soluble copolymer with toluene gave two fractions: (1) 88% by weight of a white, powder, soluble in toluene and containing 39 mole% of acrylonitrile radicals; (2) a yellow powder, soluble only in dimethyl formamide and containing 65 mole% of acrylonitrile radicals. Either powder possessed a low softening point, but their thermomechanical curves differed considerably. The copolymerization of 1,1,2-trichlorobuta-1,3-diene with vinyl chloride was also carried out in an emulsion, whereby solid lumps and lattices were obtained at the

Card 2/3

ACCESSION NR: AT4020704 S/0000/63/000/000/0128/0130

AUTHOR: Suprun, A. P.; Soboleva, T. A.; Lopatina, G. P.

TITLE: Polymerization and copolymerization of 3,3,3-trichloropropene

SOURCE: Karbotsepny*ye vy*sokomolekulyarny*ye soyedineniya (Carbon-chain macromolecular compounds); sbornik statey. Moscow, Izd-vo AN SSSR, 1963, 128-130

TOPIC TAGS: block polymerization, copolymerization, trichloropropene, polytrichloropropene, methyl methacrylate, benzoyl peroxide, vinyl acetate, styrene, acrylonitrile

ABSTRACT: The effect of temperature and reaction time on the block polymerization of 3,3,3-trichlorpropene was investigated and the thermomechanical properties of the polymer were studied. Copolymers of 3,3,3-trichloropropene with methyl methacrylate, vinyl acetate, styrene and acrylonitrile were also obtained by block polymerization. The reaction was carried out with 0.5 mol.% benzoyl peroxide under the influence of x-irradiation at different temperatures, the maximum yield being obtained at 70C. At 100C, the yield decreased. The experimental data are tabulated. "The authors would like to thank B. L. Tsetlin for carrying out the radiation polymerization." Orig. art. has: 1 figure and 2 tables.

Card 1/2

ACCESSION NR: AT4020704

ASSOCIATION: Institut elementoorganicheskikh soyedinenly AN SSSR (Institute of Organometallic Compounds, AN SSSR)

SUBMITTED: 29Apr62	DATE ACQ: 20Mar64	ENCL: 00
SUB CODE: OC	NO REF SOV: 006	OTHER: 002

Card 2/2

S/190/63/005/004/003/020
B101/B220

AUTHORS: Soboleva, T. A., Suprun, A. P., Kolesnikov, G. S.

TITLE: Carbochain polymers and copolymers. XLIV. Study of the effect of various factors on the polymerization of 1,1,2-trichloro-1,3-butadiene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 5, no. 4, 1963, 487-491

TEXT: The effects of the nature and concentration of the initiator, the temperature and the reaction time were studied as to yield and molecular weight of the polymer obtained by mass polymerization of 1,1,2-trichloro-1,3-butadiene. Results: (1) At 80°C and with a reaction time of 230 min and an initiator concentration of 0.5 mole% the following yields (%) and intrinsic viscosities in benzene at 25°C (dl/g) were obtained: with benzoyl peroxide 88.5, 0.39; with azoisobutyric dinitrile 75.5, 0.30; with tert-butyl peroxide 28.5, 0.19; with cumene hydroperoxide 29.5, 0.30; with tri-n-propyl boron 24.0, 0.17; and without initiator 21.5, 0.33. (2) The effect of the initiator concentration was investigated using benzoyl peroxide at 80°C and 230 min reaction time. The initiator concentrations (mole%), yields (%) and intrinsic viscosities (dl/g) are given: 0.1, 45.5,

0.23; 0.5, 88.5, 0.39; 1.5, 99.5, 0.20. (3) The polymer yield with 0.5 mole% benzoyl peroxide and 230 min reaction time increases from 1 % at 25°C to 96 % at 100°C. (4) Under equal conditions the intrinsic viscosity was ~0.5 at 25°C and ~ 0.1 at 40°C. (5) With 0.5 mole% benzoyl peroxide at 80°C the polymer yield was 30 % after 60 min and almost 100 % after 300 min reaction time. The intrinsic viscosity increased rapidly during the first 60 min but thereafter very slowly. (6) The following optimum values are given: 0.5 % benzoyl peroxide, 80°C, 360 min. The properties of the polymer thus obtained are: yield 99.9 %; intrinsic viscosity 0.43 dl/g; m.w. 71,000; specific weight 1.44; softening point +50°C. (7) It is evident from the IR spectrum of 1,1,2-trichloro-1,3-butadiene and its polymer that the polymer has a considerable number of CH_2 and CH groups at the double bond; this makes a further study of the mechanism of this reaction desirable. There are 4 figures and 3 tables.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Elemental Organic Compounds of AS USSR)

SUBMITTED: September 9, 1961

Card 2/2

L 13544-63 EPR/EWP(j)/EPF(c)/EWT(m)/BDS AFFTC/ASD Ps-4/Pc-4/Pr-4 RM/WW

ACCESSION NR: AP3000686 S/0190/63/005/005/0639/0643 71 70

AUTHOR: Sobolev, T. A.; Suprun, A. P.; Kolesnikov, G. S.

TITLE: Carbon-chain polymers and copolymers. 46. The influence of various factors on the emulsion polymerization of 1,1,2-trichlorobuta-1,3-diene

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 5, no. 5, 1963, 639-643

TOPIC TAGS: carbon-chain polymers, emulsion polymerization, trichlorobutadiene, initiator, emulsifier

ABSTRACT: The present work is a continuation of an earlier investigation by the authors, with the difference that there the 1,1,2-trichlorobuta-1,3-diene was in bulk. In the present work a study was made of the ratio of phases, nature, and concentration of initiator, reaction temperature, reaction time, and emulsifier concentration in relation to the yields and molecular weights of the resultant polymers. The experiments were conducted in sealed, evacuated ampules. A maximum yield of polytrichlorobutadiene was obtained at a ratio of the aqueous to the oily phase of 1.8/1, with a concentration of the initiator (potassium persulfate) of 0.17 Mol%, at a temperature of 50C, a reaction time of approximately 5 hours, and with 1% of the emulsifier used. Under the above optimal conditions for the initiator, phase ratio, and temperature, and with an almost double concentration of

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L 13544-63
ACCESSION NR: AP3000686

emulsifier and reaction time, a polytrichlorobutadiene of 3,400,000 molecular weight was obtained, as against the figure of 70,000 for the earlier work where the process of polymerization was conducted on bulk material. Orig. art. has: 3 tables and 3 figures.

ASSOCIATION: Institut elementoorganicheskikh soyedinenii AN SSSR (Institute of Organoelemental Compounds, Academy of Sciences SSSR)

SUBMITTED: 04Oct61 DATE ACQ: 17Jun63 ENCL: 01

SUB CODE: CH NO REF SOV: 003 OTHER: 000

Card 2/2

SOBOLEVA, T.A.; SUPRUN, A.P.; PAVLOVA, S.A.

Polydispersity of polymers of 1,1,2-trichloro-1,3-butadiene. Vysokom. soed. 6 no.1:89-91 Ja'64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

PAVLOVA, S.A.; SOBOLEVA, T.A.; SUPRUN, A.P.

Viscosity and molecular weight of polytrichlorobutadiene.
Vyskom. soed. 6 no.1:122-124 Ja'64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ACCESSION NR: AP4032573 S/0190/64/006/004/0726/0728

AUTHORS: Suprun, A. P.; Soboleva, T. A.; Lopatina, G. P.

TITLE: Polymerization of 3,3,3-trichloropropene under pressure

SOURCE: Vy*sokomolek. soyedin., v. 6, no. 4, 1964, 726-728

TOPIC TAGS: methyl ethylene, propene, trichloropropene, trichloropropene polymerization, pressure polymerization, benzoyl peroxide initiator, radical polymerization mechanism, polytrichloropropene, polytrichloropropene thermomechanical property

ABSTRACT: Polymerization of 3,3,3-trichloropropene was conducted in special lead ampules placed in a high-pressure reactor. It was found that in the presence of 0.6 mole/% of benzoyl peroxide as initiator and at a temperature of 50C a yield of polytrichloropropene of 5, 19, and 31% respectively was obtained after 6 hours under 3000, 6000, and 7000 atmospheres. Without initiator, the yield of the polymer under 6000 atm at 50C and after 12 hours was only 4%. In the presence of 1 and 3 mole/% of the initiator it reached 50 and 75% respectively. The polymer was soluble in benzene, toluene, xylene, nitrobenzene, chloroform, carbon tetrachloride,

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ACCESSION NR: AP4032573

trichloroethylene and anisole. It had a molecular weight of 3500, an amorphous structure with small crystalline inclusions, and a softening point at 50C. The authors state that in the presence of benzoyl peroxide (without pressure application) the molecular weight of the resulting polytrichloropropene averages 1200, with 15% of it as high as 16 000. The high-molecular fraction differs in solubility and other properties from the main mass. Trichloropropene does not polymerize under normal pressure in the presence of 0.6 mole/% of initiator. Orig. art. has: 2 tables and 2 charts.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Organoelemental Compounds, AN SSSR)

SUBMITTED: 24May63 DATE ACQ: 11May64 ENCL: 00

SUB CODE: CH NO REF SOV: 002 OTHER: 000

Card 2/2

2

L 41150-65 EWG(j)/EPA(s)-2/EWT(m)/EPF(c)/EPR/EWP(j)/T/EWA(h)/EWA(1) Pc-4/
Pr-4/Ps-4/Pt-10/Peb RPL WW/GS/RM
ACCESSION NR: AT5002110 S/0000/64/000/000/0042/0045

56
49
B+1

AUTHOR: Freydlina, R.Kh.; Kolesnikov, G.S.; Slonimskiy, G.L.; Suprun, A.P.; Soboleva, T.A.; Belyavskiy, A.B.; Yershova, V.A.

15

TITLE: New chlorinated monomers for the synthesis of noncombustible polymers

SOURCE: AN SSSR. Institut neftekhimicheskogo sinteza. Sintez i svoystva monomerov (The synthesis and properties of monomers). Moscow, Izd-vo Nauka, 1964, 42-45

TOPIC TAGS: fire resistant polymer, polymer mechanical property, chlorinated polymer, chloroalkene polymerization, telomerization, dehydrahalogenation, radiation polymerization

ABSTRACT: 3,3,3-Trichloropropene and 1,1,2-trichloro-1,3-butadiene, which have been described in previously published studies, were prepared by a two-step reaction and their homo- and copolymerization was studied in an effort to obtain noncombustible polymers. 3,3,3-Trichloropropene was synthesized via 1,1,1,3-tetrachloropropane by telomerization of ethylene with carbon tetrachloride (J. Am. Chem. Soc. 70, 2529 (1948) and dehydrohalogenation of 1,1,1,3-tetrachloropropane with KOH in ethylcellosolve solution to give a 53% yield of 3,3,3-trichloropropene and 1,1,3-trichloropropene as a by-product. The latter

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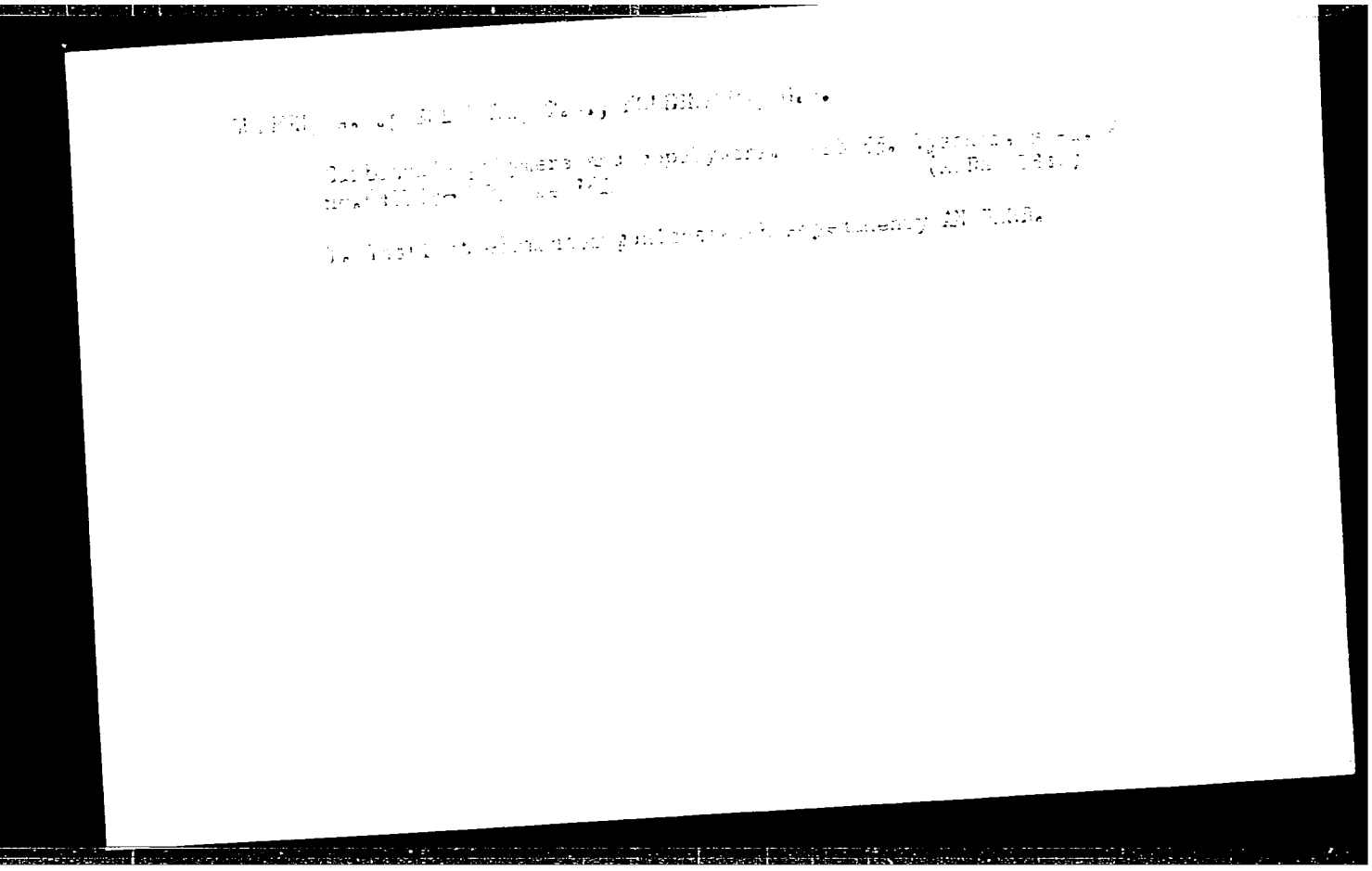
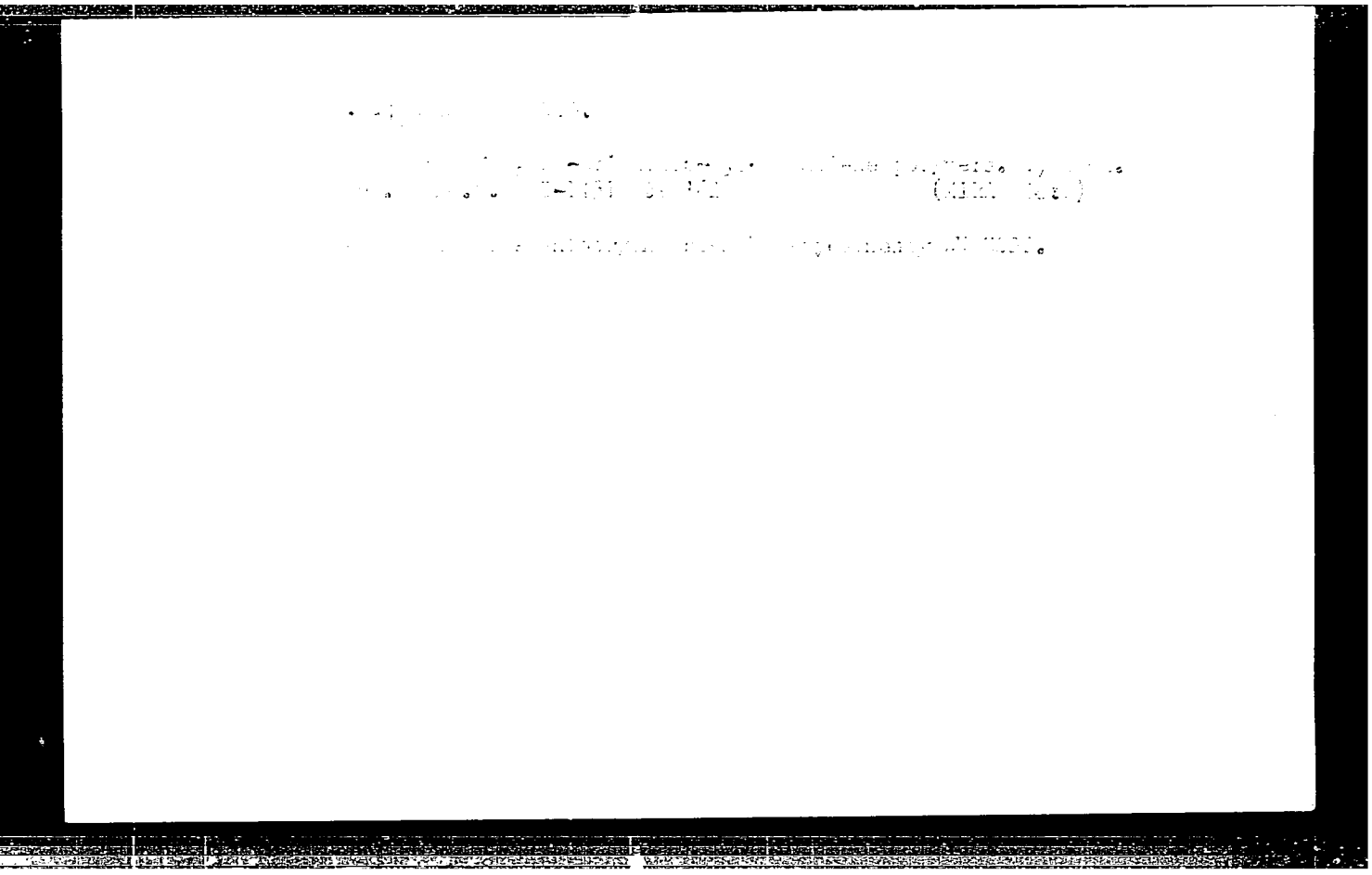
L 41150-65
ACCESSION NR: AT5002110

was also formed by isomerization during the block polymerization of 3,3,3-trichloropropene with benzoyl peroxide, and isomerization decreased the yield of solid polymer from 6.1% at 70C to 0.2% at 100C. A viscous, low-molecular, liquid polymer was also formed. Solid polymer was also formed in 37.3% yield in 160 hours under irradiation, and fractionated into soluble polymer and a fraction which was soluble only in tetrahydrofuran or hot benzene. Copolymers which are not described, were formed with methyl methacrylate, styrene, vinyl acetate, and acrylonitrile. By a similar technique, 1,1,2-trichloro-1,3-butadiene was prepared via 1,1,2,4-tetrachloro-1-butene, formed in 20% yield with by-products by telomerization of ethylene with tetrachloroethylene, and by dehydrohalogenation. The copolymerization of 1,1,2-trichloro-1,3-butadine has been described in published papers, and its homopolymerization under undefined optimal conditions yielded 99.9% block polymer (110,000 molecular weight), or 95.2% yields in emulsion polymerization with polymers of 3,500,000 molecular weight. The monomer was shown to have markedly higher activity than styrene, and the polymers showed good solubility, resistance to cold inorganic acids, high tensile strength, and adhesion to various materials. "The authors thank B.L. Tseitlin for carrying out the irradiation-polymerization tests." Orig. art. has: 1 table and 4 formulas.

Card 2/3





SOBOLEVA, T.I., inzhener

Let us standardize yarn breakage norms in weaving processes.
Tekst.prom. 15 no.6:6-8 Je '55. (MLRA 8:7)

1. Laboratoriya fabriki imeni Frunze.
(Weaving)

GRIF, V.G.; SOBOLEVA, T.I.

Changes in the chromosome morphology caused by the effect of environmental conditions. Bot. zhur. 50 no.1:109-112 Ja '65.

(MIRA 18:3)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

SOBOLEVA, T.K., assist.

Methods of determining labor productivity on the lower levels of railroad transportation. Trudy MTEI no.7:88-97 '57. (MIRA 11:5)
(Railroads--Employees) (Labor productivity)

SOBOLEVA, T.K., inzh.-ekonomist

Methods of determining labor productivity in railroad transportation. Trudy MTEI no.10:94-118 '58. (MIRA 12:2)
(Railroads--Labor productivity)

SOBOLEVA, T.K., kand.ekonom.nauk

The organizational structure as a factor in increasing U.S.S.R railroad transportation workers' labor productivity. Trudy MIIT no.166:52-65 '62. (MIRA 16:6)

(Railroads--Management)

SHCHERBAKOV, I.M., dots., LISOVSKAYA, N.D., SOBOLEVA, T.I.

Etiopathogenetic treatment of psoriasis, lupus erythematosus, and some other skin diseases presumably of viral origin. Trudy LMI 2:223-232 '55 (MIRA 11:8)

1. Kafedra kozhnykh bolezney (zav. - deystvitel'nyy chlen AMN SSSR prof. O.N. Podvyeotskaya) Pervogo Leningradskogo meditsinskogo instituta imeni akademika I.P. Pavlova.
(SKIN--DISEASES)
(VIRUS--DISEASES)

SOBOLEVA, T.L.

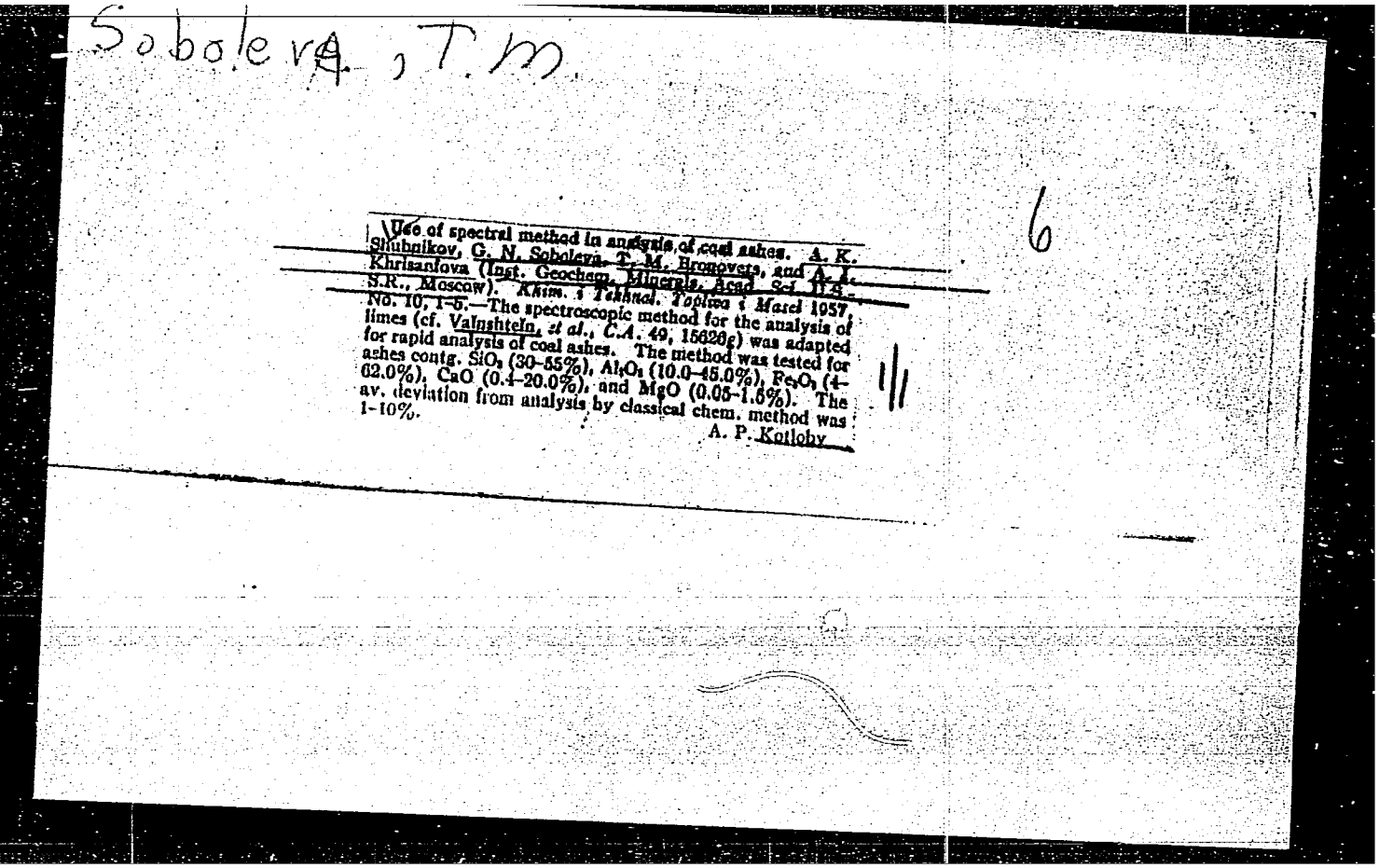
Case of cured acute pemphigus. Vest.ven. i derm. no.3:53-54 My-Je '56 (MLRA 9:9)

1. Iz kliniki kozhnykh i venericheskikh bolezney I Leningradskogo meditsinskogo instituta.
(PEMPHIGUS)

SOBOLEVA, T.L.; KOGAN, S.I.

Mental disorders in systemic lupus erythematosus and their treatment. Vop. psikh. i nevr. no.9:240-249 '62.
(MIRA 17:1)

1. Kafedra kozhnykh bolezney (zav. - prof. A.N. Araviyskiy) i kafedra psikhiatrii (zav. - prof. D.S. Ozeretskovskiy) 1-go Leningradskogo meditsinskogo instituta imeni akademika Pavlova.



Soboleva, T. M.

6

Use of spectral method in analysis of coal ashes. A. K. Shubnikov, G. N. Soboleva, T. M. Bronovets, and A. I. Khrisanfova (Inst. Geochem., Minerals, Acad. Sci. U.S.S.R., Moscow). *Khim. i Tekhnol. Topliva i Masel* 1957, No. 10, 1–5.—The spectroscopic method for the analysis of limes (cf. Valnshtein, *et al.*, *C.A.* 49, 15628g) was adapted for rapid analysis of coal ashes. The method was tested for ashes contg. SiO_2 (30–55%), Al_2O_3 (10.0–45.0%), Fe_2O_3 (4–62.0%), CaO (0.4–20.0%), and MgO (0.05–1.6%). The av. deviation from analysis by classical chem. method was 1–10%.

A. P. Kotloby

1/11

SOBOLEVA, T. M. Cand Tech Sci -- (diss) " Rational method of cleaning and grading of seeds of scrub-wood species." Mos,1957. 20 pp. with illustrations. (Min of Higher Education USSR. Mos Forestry Engineering Inst.) 120 copies.
(KL, 8-58, 106)

USSR / Forestry. Forest Cultures.

K

Abs Jour : Ref Zhur - Biologiya, No 18, 1958, No. 82212

Author : Soboleva, T. M.
Inst : High School of Forest Engineering
Title : Physical-Mechanical Properties of Forest Seeds as the Basis of Efficient Technological Cleaning and Sorting Processes

Orig Pub : Nauchn. dokl. vyssh. shkoly. lesoinzh. delo, 1958, No 1, 52-56

Abstract : No abstract given

Card 1/1

FRENKEL', Z.G., prof.; BEN, Ye.E., prof.; SOBOLEVA, T.S., dotsent (Leningrad)

Toward a fifth revision of the Soviet nomenclature of diseases. Vrach. delo no.5:521 My '59. (MIRA 12:12)

1. Deystvitel'nyy chlen AMN SSSR (for Frenkel').
(NOSOLOGY)

FRENKEL', Z.G., prof.; SOBOLEVA, T.S., dotsent

"Statistical Yearbook of the German Democratic Republic, 1959". Reviewed by Z.G.Frenkel', T.S.Soboleva. Gig. i san. no.5:116-118 My '61. (MIRA 15:4)

1. Deystvitel'nyy chlen AMN SSSR (for Frenkel').
(GERMANY, EAST--YEARBOOKS)

FRENKEL', Z.G.; SOBOLEVA, T.S., dotsent (Leningrad)

Population of Finland as revealed by data on hygiene and demography. Sov. zdrav. 20 no.8:91-96 '61. (MIRA 15:1)

1. Deystvitel'nyy chlen AMN SSSR (for Frenkel').
(FINLAND--VITAL STATISTICS)

FRENKEL', Z.G., prof.; SOBOLEVA, T.S., dotsent

"Statistical Yearbook of the People's Republic of Bulgaria, 1959." Reviewed by Z.G.Frenkel', T.S.Soboleva. Gig. i san. 26 no.5:118-120 My '61. (MIRA 15:4)

1. Deystvitel'nyy chlen AMN SSSR (for Frenkel');
(BULGARIA--YEARBOOKS)

FRENKEL', Z.F., prof.; SOBOLEVA, T.S., dotsent

"Statistical Yearbook of the Czechoslovak Republic." Reviewed by Z.G.Frenkel', T.S.Soboleva. Gig. i san. 26 no.6:114-116 Je '61. (MIRA 15:5)

(CZECHOSLOVAKIA--YEARBOOKS)

FRENKEL', Z.G., prof.; SOBOLEVA, T.S., dotsent

"Concise statistical collection of the Rumanian People's Republic." Reviewed by Z.G.Frenkel', T.S.Soboleva. Gig. i san. 26 no.8:115-116 Ag '61. (MIRA 15:4)

(RUMANIA--VITAL STATISTICS)

L 24170-66

ACC NR: AP6015183 SOURCE CODE: UR/0240/65/000/002/0121/0122

REVIEWER: Frenkel, Z.G. (Professor; Active member AMN SSSR); Soboleva, T.S. (Docent)

ORG: none

TITLE: Review of book by B. Ts. Urlanis entitled 'Birth Rate and Life Expectancy in the USSR' (Rozhdayemost' i prodolzhitel'nost' zhizni v SSSR), TsSU SSSR, Moscow, 1963, 136 pages

SOURCE: Gigiyena i sanitariya, no. 2, 1965, 121-122

TOPIC TAGS: social problem, anthropology

ABSTRACT: In the preface of the book, the author discusses the socialist law of population, as distinguished from the law of population under capitalism. And indeed, in the socialist transformation of society, especially in the initial period, the mortality index does drop faster than the birth rate. But with the more active participation of women in the work of society the birth rate will not increase but should drop from 35-45 to 17-22 per 1000. And with the rise in average life expectancy and increase in the size of older age groups the mortality rate will rise to 9-12 or even 14 per 1000. The national population increase will not therefore rise but will fall, as has occurred in Czechoslovakia and other socialist countries. The reviewers list a number of less important factual errors and errors in interpre-

Card 1/2 UDC: 312.1+312.287(470)

L 24170-66

ACC NR: AP6015183

tation made by the author, and they note substantial shortcomings in the presentation of statistics and graphs. Finally, they criticize his assertion that in the USSR the addition of years of life expectancy has been uniform for all age groups. This assertion contradicts both the complete mortality table of the Central Statistical Bureau for 1958-1959 and the Marxist-Leninist doctrine that death is an essential element of life. [JPRS]

SUB CODE: 05 / SUBM DATE: none

Card 2/2 FV

SOBOLEVA, V. A.; PAVLOV, S. Ye. (Deceased)

"Investigation of the Causes of Pitting of Aluminum Tap Water," Korroziya i azshchita metallov (Corrosion and Protection of Metals), Moscow, Obornogiz, 1957. 366 p.

PURPOSE: This book is intended for engineering, technical, and scientific personnel at industrial plants, research institutes, and design offices working in the field of corrosion-protection of stainless steel, high-strength structural steel, and light alloys.

SOV/137-58-10-21312

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 124 (USSR)

AUTHORS: Pavlov, S. Ye., Soboleva, V. A.

TITLE: Investigation of the Causes of Tuberculation of Aluminum in Tap Water (Issledovaniye prichin tochechnoy korrozii alyuminiya v vodoprovodnoy vode)

PERIODICAL: V sb.: korroziya i zashchita metallov. Moscow, Oborongiz, 1957, pp 236-259

ABSTRACT: Investigations of the corrosion behavior of grade AD1, AD (from various plants), A00 and A000 sheet Al in tap water showed that the tendency towards tuberculation (T) decreases with an increase in the purity of the metal but is not completely eliminated even in A000. T of Al begins at a pH close to neutral. Upon an increase in pH the probability of the occurrence of corrosion decreases while its rate increases. T originates at points where a disruption of continuity of the oxide film occurs near insoluble intermetallic intrusions which act as cathodes (for example $FeAl_3$). The susceptibility of sheet Al to T is considerably decreased upon its alloying with 0.5% Mg, 0.5% Mg + 0.5% Mn, or 0.2% Ti. The tendency of sheet Al towards

Card 1/2

SOV/137-58-10-21312

Investigation of the Causes of Tuberculation (cont.)

T can be eliminated by boiling it for 30 min in distilled or previously boiled tap water.

1. Aluminum--Corrosion 2. Hydrogen ion concentration--Corrosive effects L. A.

Card 2/2

Country : USSR
Category: Virology. Bacterial Viruses (Phages)

E

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103485.

Author : Bystryy, N.F.; Togoladze, Z. D.; Soboleva, V. A.
Inst : -
Title : Methods of Preparing Dry Lyophilic Bacteriophage.

Orig Pub: Sb. Bakteriofagiya. Tbilisi. Gruzmedgiz, 1957, 145-154.

Abstract: Dysentery phages prepared on Martin's or Hottinger's bouillon and desiccated by the lyophilic method in a Dolinov collector apparatus maintain their activity well for over two years. The dry preparation obtained in readily soluble in water. For the purpose of improving the taste qualities of the phage it was suggested that it be prepared on synthetic medium (the

Card : 1/2

Country : USSR E
Category: Virology. Bacterial Viruses (Phages)

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103516

Author : Bystryy, N.F.; Soboleva, V. A.
Inst : -
Title : The Characteristics of Wound Aerobic Phages

Orig Pub: Sb. Bakteriofagiya. Tbilisi, Gruzmedgiz, 1957, 379-385

Abstract: From sewage and material taken from the pharynx of patients with scarlet fever and from the pus of patients phages for streptococci and staphylococci were isolated. After several passages the staphylococcic phages showed not only an increase in titer but also an expansion of the spectrum of lytic action.

Card : 1/2

SOBOLEVA, V. D.

29930

Kliniko-ryentgygnologichyeskiye nablyudyeniya nad izmyenyeniyami v lyegkikh pri koklyushye. Pyediatriya, 1949, No 4, s. 40-45.--Bibliogr: s. 45

SO: LETOPIS' NO. 40

183T70

USSR/Medicine - Infectious Diseases Mar/Apr 51

"Peculiarities of the Course of Influenza in Children Infected With Whooping Cough," V. D. Soboleva, Infectious Diseases Dept, Inst of Pediatry, Acad Med Sci USSR, Hosp imeni Rusakov

"Pediatriya" No 2, pp 24-29

Describes very severe course of the disease in children infected with both influenza and whooping cough.

183T70

SOBOLEVA, V. D.

Whooping Cough

Whooping cough and measures for its control in children's institutions.
Med. sestra no. 4, 1952.

Monthly List of Russian Accessions Library of Congress, November 1952. UNCLASSIFIED.

SOBOLEVA, V.D.

Progress in the treatment of whooping cough in children. Fel'dsher & skush. no.5:23-28 May 1953. (CLML 25:1)

1. Candidate Medical Sciences. 2. Moscow.

SOBO[illegible]VA, V. D.

USSR/Medicine - Influenza Feb 53

"Whooping Cough Complicated by Influenza," V. D. Soboleva, Div of Inf Diseases, Inst of Pediatry, Acad Med Sci USSR

Sovetskaya Meditsina, Vol 17, No 2, pp 10-13

The clinical course of influenza in infants who are infected with whooping cough is more severe than in those infants in whom the influenza is not aggravated by any other disease. Influenza infection in infants under one year of age, who are also affected with whooping cough, is dangerous. Involvement of the

247T27

organs of respiration and of the nervous system usually leads to cardiovascular disorders. The mortality rate among infants is high when the cardiovascular system is affected.

247T27

[illegible] 247T27

SOBOLEVA, V.D.

Certain achievements in the study of whooping cough and further prospects for its control. Pediatriia no.4:40-46 Jl-Ag '54.
(MLRA 7:10)

1. Iz infektsionnogo otdela (nauchnyy rukovoditel' chlen-korrespondent AMN SSSR prof. A.I.Dobrokhotova) Instituta pediatrii AMN SSSR (dir. prof. M.N.Kazantseva) na baze 2-y klinicheskoy bol'nitsy imeni Rusakova (glavnyy vrach zasluzhennyy vrach RSFSR dotsent V.A.Kruzhkov.
(WHOOPING COUGH, prevention and control,)

SOBOLEVA, V. D., Doc Med Sci -- (diss) "Affliction of the respiratory organs in children with whooping cough. Clinical-roentgenological and experimental research." Moscow, 1960. 22 pp; (Academy of Medical Sciences USSR); 300 copies; price not given; list of authors' works at end of text (18 entries); (KL, 31-60, 143)

SOBOLEVA, V.D., kand.med.nauk

Features of lesions of the respiratory organs in whooping cough. Vest.AMN SSSR 15 no.3:33-38 '60. (MIRA 14:5)

1. Institut pediatrii AMN SSSR i Detskaya klinicheskaya bol'nitsa No.2 imeni Rusakova.
(WHOOPING COUGH) (RESPIRATORY ORGANS--DISEASES)

SOBOLEVA, V.D.

Experience in the active detection of patients with Botkin's disease under polyclinical conditions. Sov. med. 24 no. 2:120-125 F '60. (MIRA 14:2)

1. Iz laboratorii deystvitel'nogo chlena AMN SSSR prof. Ye.M. Tareyeva i sanitarno-epidemiologicheskoy stantsii Rizhskogo rayona Moskvy (glavnyy vrach A.A. Nelyubov).
(HEPATITIS, INFECTIOUS) (ALDOLASE)

SOBOLEVA, V.D.

Basic problems in whooping cough prevention. Pediatriia 38 no.6: 35-40 Je '60. (MIRA 13:12)
(WHOOPING COUGH)

SOBOLEVA, V.D., red.; DMITRIYEVA, N.M., red.; SENCHILO, K.K., tekhn. red.

[Problems of whooping cough]Problemy kokliusha. Pod red. V.D.Sobolevoi. Moskva, Medgiz, 1961. 133 p. (MIRA 15:10)

1. Akademiya meditsinskikh nauk SSSR, Moscow.
(WHOOPING COUGH)

SOBOLEVA, V.D., doktor med. nauk; SKORBILINA, T.N., red.; NEYMAN, M.I., red.; KOKIN, N.M., tekhn. red.

[Protect children from infectious diseases] Beregite detei ot zaraznykh zabolevanii. Izd. 2., isp. i dop. Moskva, Moskva, Medgiz, 1963. 184 p. (MIRA 17:2)

SOBOLEVA, V.D.

Effect of γ-globulin on the change of aldolase activity in those in contact with a focus of Botkin's disease. Sov.Med. 27 no.7:105-110 Jl'63. (MIRA 16:9)

1. Iz gruppy deystvitel'nogo chlena AMN SSSR prof. Ye.M. Tarayeva.

(HEPATITIS, INFECTIOUS) (GAMMA GLOBULIN)
(ALDOLASE)

SOBOLEVA, V.D.

Course of the infectious process among contacts based on data of the aldolase test and the epidemiological analysis of Botkin's disease in its foci. Vop.med.virus. no.9:187-192 '64. (MIRA 18:4)

1. Iz laboratorii deystvitel'nogo chlena AMN SSSR prof. Ye.M. Tareyeva.

SOBOLEVA, V.D., doktor med. nauk; KRUGLIKOVA, Y.L.

Adenoviral infections in children. Sov. med. 27 no.2:93-96 F '64. (MIRA 17:10)

1. Institut pediatrii (dir. - dotsent M.Ya. Studenikin) AMN SSSR, Moskva.

SOBOLEVA, V.D., doktor med.nauk; POPOVA, L.A., kand.med.nauk

Lesion of respiratory organs and cardiovascular system in children with influenza. Sov. med. 28 no.7:50-56 Jl '64. (MIRA 18:8)

1. Infektsionnaya klinika (zav. - prof. S.D.Nosov) Instituta pediatrii (dir. - dotsent M.Ya.Studenikin) AMN SSSR, Moskva.

KHOLODOVSKAYA, R.S.; BABYNINA, K.I.; SPIVAK, B.N.; Prinimala uchastiye SOBOLEVA, V.G.

Synthesis of terephthalic polyesters and their use as a base for the production of impregnation lacquers for electric insulation materials. Lakokras.mat. i ikh prim. no.3:12-16 '63. (MIRA 16:9)
(Terephthalic acid) (Protective coatings)
(Electric insulators and insulation)

SOBOLEVA, V.I.; ANICHKOV, N., akademik.

Effect of urethane upon the resistance to anemia of the central nervous system of frogs. Izv.AN SSSR. Ser.biol. no.3:74-81 My-Je '53. (MLRA 6:6)

1. Laboratoriya eksperimental'noy fiziologii po ozhivleniyu organizma Akademii meditsinskikh nauk SSSR. (Anemia) (Nervous system) (Urethanes) (CA 47 no.16:8251 '53)

3

SOBOLEVA, V. I.

Summaries of papers presented at the XXVI Congress of Surgeons of the USSR, Moscow, 20 - 27 January 1955, included:

The Resistance of the Heart and Central Nervous System under Conditions of Artificial Hypothermia.

V. A. NEGOVSKY and V. I. SOBOLEVA

SOURCE: [redacted]-A-46013 (Official Publication) Unclassified.

SOBOLEVA, V.I.

NEGOVSKIY, V.A., professor; SOBOLEVA, V.I.

Hypothermic technique in the restoration of vital functions of the organism after prolonged periods of clinical death.(experimental research) Khirirgiia, no.9:22-26 S '55. (MLRA 9:2)

1. Iz laboratorii eksperimental'noy fiziologii po ozhivleniyu organizma (zav.-prof. V.A. Negovskiy) AMN SSSR)

(BODY TEMPERATURE
hypothermia, exper., restoration of vital funct.)

SOBOLEV, V. I.

Sobolev, V. I. "Extinction and restoration of the life functions of the organism in lethal poisoning with carbon monoxides (experimental investigation)." Inst of Higher Nervous Activity, Acad Sci USSR. Moscow, 1956. (Dissertation for the Degree of Candidate in Medical Science)

So: Knizhnaya letopis', No. 27, 1956. Moscow. Pages 94-109; 111.

NEGOVSKIY, V.A.(Moskva); SOBOLEVA, V.I. (Moskva)

Dynamics of extinction and restoration of vital function of the organism following fatal exsanguination in hypothermia. Arkh.pat. 18 no.6:58-70 '56. (MLRA 9:12)

1. Iz laboratorii eksperimental'noy fiziologii po ozhivleniyu organizma (zav. - prof. V.A.Negovskiy) AMN SSSR.

(HYPOTHERMIA, experimental,
extinction & restoration of vital funct. in exsanguination (Rus))
(HEMORRHAGE, experimental,
extinction & restoration of vital funct. in exsanguination (Rus))
(DEATH,
same)

EXCERPTA MEDICA Sec 2 Vol 12/2 Physiology Feb 59

723. RESTORATION OF HIGHER NERVOUS ACTIVITY IN DOGS, REVIVED AFTER 30 MINUTES OF CLINICAL DEATH UNDER CONDITIONS OF HYPOTHERMIA (Russian text) - Murskii L. I. and Soboleva V. I. Ushinskii Ped. Inst., Yaroslavl; Lab. for Revivification of the Organism, USSR Acad. of Med. Scis, Moscow - BYULL. EKSPER. BIOL. I MED. 1957, 44/8 (43-46) Tables 1

Changes in the higher nervous activity were studied in 4 dogs, revived after 30 min. of clinical death from acute haemorrhage under conditions of general hypothermia of the organism. A system of conditioned reflexes had previously been produced in the animals by the acid-defence method. On the 2nd day from the start of revivification the dogs did not differ greatly from healthy animals, but their higher nervous activity proved to be impaired. These disturbances were manifested in the excessive exhaustion of the functions of higher parts of the CNS or in various degrees of hypnotic state ranging from insignificantly changed attitudes to extreme forms of an ultraparadoxical phase. Complete restoration of the higher nervous activity was achieved within 13-23 days from the beginning of revivification. References 8.

Sbitneva - Moscow (S)

SOBOLEVA, V.I. (Moskva)

Restoration of vital functions in acute carbon monoxide poisoning [with summary in English]. Pat.fiziol. i eksp.terap. 1 no.1:12-19 Ja-F '58. (MIRA 12:1)

1. Iz laboratorii eksperimental'noy fiziologii po ozhivleniyu organizma (zav. - prof. V.A. Negovskiy) AMN SSSR.
(CARBON MONOXIDE, pois.
resuscitation, technic)
(RESUSCITATION,
in carbon monoxide pois.)

NEGOVSKIY, V.A.; GURVICH, A.M.; SOBOLEVA, V.I. (Moskva)

Effect of hypothermia of various depths on the electroencephalogram in dogs during dying from acute hemorrhage with consecutive restoration of life functions. Pat.fiziol. i eksp.terap. 3 no.5:33-41 S-O '59.
(MIRA 13:3)

1. Iz laboratorii eksperimental'noy fiziologii po ozhivleniyu organizma (zaveduyushchiy - prof. V.A. Negovskiy) AMN SSSR.
(HYPOTHERMIA, INDUCED eff.)
(ELECTROENCEPHALOGRAPHY)
(RESUSCITATION)
(DEATH)

NEGOVSKIY, V.A.; SOBOLEVA, V.I.

Hibernation as a therapeutic method in terminal states.
Farm. i toks. 22 no.2:172-175 Mr-Ap '59. (MIRA 12:6)

1. Laboratoriya eksperimental'noy fiziologii po ozhivleniyu organizma (zav. - prof. V.A.Negovskiy) AMN SSSR.
(HIBERNATION, ARTIFICIAL,
lytic cocktail in exper. resuscitation (R_{us}))
(RESUSCITATION,
same)

NEGOVSKIY, V.A.; SOBOLEVA, V.I.; GURVICH, N.L.; KISELEVA, K.S.; MACHAVARIANI, Sh.S.

Restoration of vital function in monkeys after mortal exsanguination under hypothermic conditions. Biul.eksp.biol.i med. 48 no.11:30-34 N '59. (MIRA 13:5)

1. Iz laboratorii eksperimental'noy fiziologii po ozhivleniyu organizma (zav. - prof. V.A. Negovskiy) AMN SSSR, Moskva, i Instituta eksperimental'noy patologii i terapii (dir. - doktor biologicheskikh nauk I.A. Utkin), Sukhumi. Predstavlena deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.

(RESUSCITATION exper.)
(HEMORRHAGE exper.)
(HYPOTHERMIA, INDUCED exper.)

SOBOLEVA, V.I., kand.med.nauk

A study of terminal states under experimental and clinical conditions. Vest. AMN SSSR 15 no.9:83-86 '60. (MIRA 13:11)

1. Laboratoriya eksperimental'noy fiziologii po ozhivleniyu organizma AMN SSSR.
(DEATH) (RESUSCITATION)

NEGOVSKIY, V.A.; SOBOLEVA, V.I.; GURVICH, N.L.; KISELEVA, K.S.

Restoration of the vital functions of the organism following 2 hours of clinical death under deep hypothermia; preliminary report. Vest. AMN SSSR 15 no. 10:40-44 '60. (MIRA 14:4)

1. Laboratoriya eksperimental'noy fiziologii po ozhivleniyu organizma AMN SSSR.
(RESUSCUTATION) (HYPOTHERMIA)

11613

S/219/62/054/010/001/004
D296/D307

27.2300

AUTHORS: Soboleva, V.I., Semenov, N.V. and Gorokhovskiy, B.O.

TITLE: Restoration of the vital functions in animals after prolonged clinical death under conditions of localized hypothermia in the brain

PERIODICAL: Akademiya meditsinskikh nauk SSSR, Byulleten' eksperimental'noy biologii i meditsiny, v. 54, no. 10, 1962, 33 - 36

TEXT: Resuscitation is still possible after clinical death lasting 30 - 60 min, provided the body temperature is lowered to 26 - 20°C. Severe circulatory disorders and ventricular fibrillation are, however, frequent complications of this technique. It was assumed that hypothermia confined to the brain would prolong the period of cerebral anoxia after which successful resuscitation was still possible, without impairment of the cardiac function. After injection of pantopon and atropine the carotid and the femoral arteries were laid bare in 15 dogs under local anaesthesia. The left

Card 1/3

carotid artery was transsected and the blood flowing from the lower stump was diverted through a spiral tube surrounded by ice and then led back through the upper stump into the brain. The right carotid artery was clamped off. In 8 dogs the fall in the brain temperature was measured directly by thermoelements inserted through trepanation holes. When the rectal temperature had reached 32.9 - 29.5°C clinical death was induced by bleeding from the femoral artery. Resuscitation was begun in 9 dogs after 30 min and in 6 dogs after 60 min by means of intra-arterial blood transfusion and with the aid of a respirator. Ventricular fibrillation developed in 13 out of 15 dogs, i.e. just as frequently as in the control dogs exposed to total body hypothermia. In general the resuscitation was much less successful than in the control dogs. After a state of clinical death lasting 60 min none of the experimental dogs could be successfully resuscitated whereas 4 out of 7 control dogs could be fully revived. After clinical death lasting 30 min, only 3 out of 9 dogs could be resuscitated, compared to 8 out of 10 in the control animals. Autopsy revealed congestion of the brain and of the abdominal organs, multiple hemorrhages in the internal organs and occasionally pulmonary edema and thrombosis of the

right auricle. The authors explain the poor results with the toxic effect of inadequately oxidized metabolic products accumulating in the rest of the body kept at relatively higher temperatures and with the increased permeability of the blood vessels: it was further assumed that the artificial perfusion of the brain caused direct damage to the nervous elements.

ASSOCIATION: Laboratoriya eksperimental'noy fiziologii po ozhivleniyu organizma, AMN SSSR (Laboratory of Experimental Physiology for Resuscitation, AMS USSR) and Kafedra fiziologii kalininskogo meditsinskogo instituta (Department of Physiology, Kalinin Medical Institute)

SUBMITTED: March 5, 1962

SOBOLEVA, V.I. (Moskva)

Effect of general cooling and hibernation on the restoration of vital functions in animals subjected to clinical death from acute hemorrhage. Pat. fiziol. i eksp. terap. 6 no.1:28-33 Ja-F '62. (MIRA 15:3)

1. Iz laboratorii eksperimental'noy fiziologii po ozhivleniyu organizma (zav. - prof. V.A. Negovskiy) AMN SSSR.
(HYPOTHERMIA) (ARTIFICIAL HIBERNATION)
(DEATH, APPARENT) (HEMORRHAGE)

ACCESSION NR: AP4000269 S/0219/63/056/011/0039/0043

AUTHOR: Negovskiy, V. A.; Soboleva, V. I.; Gurvich, N. L.; Kiseleva, K. S.

TITLE: Deep hypothermia as a method for prolonging clinical death periods

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny*, v. 56, no. 11, 1963, 39-43

TOPIC TAGS: hypothermia, clinical death, resuscitation process, resuscitation process inhibitor, loss of blood, blood loss, acute blood loss, blood infusion, intraarterial infusion, intraarterial blood infusion, blood perfusion, heart dilation, hemodynamic disturbance, metabolic acidosis

ABSTRACT: In two groups of experimental dogs body temperature was reduced to 20-23°C and venesection was performed to induce clinical death. Animals were revived after clinical death of two hours with heat, blood perfusion, artificial respiration, defibrillation, and heart stimulation. Electrocardiograms were recorded during the entire experiment. In the first group of 23 dogs only 5 animals survived

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clinical death with complete restoration of their vital functions. All other animals in this group either died within 2 days after the experiment or failed to revive at all. Resuscitation failure was attributed to imperfect blood perfusion causing acute heart dilation, marked hemodynamic disorders during restoration period, and severe acidosis inhibiting further restoration and leading to serious changes in the brain and internal organs. These factors were controlled in reviving the second group of 8 dogs, and fresh donor blood and blood substitution were also used in the later stages of revival. All 8 animals were revived and vital functions were completely restored in 5 of the animals. Thus, under deep hypothermia clinical death can be prolonged to 2 hrs with subsequent complete restoration of vital functions. Orig. art. has: none.

ASSOCIATION: Laboratoriya eksperimental'noy fiziologii po ozhivleniyu organisma, AMN SSSR, Moskva (Experimental Physiology Laboratory for Organism Revival, AMN SSSR)

SUBMITTED: 21Jun63 DATE ACQ: 04Dec63 ENCL: 00

SUB CODE: AM NO REF SOV: 006 OTHER: 012

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NEGOVSKIY, V.A.; SOBOLEVA, V.I.; GURVICH, N.L.; KISELEVA, K.S.

Deep hypothermia as a method of prolonging clinical death periods. Biul. eksp. biol. i med. 56 no.11:39-43 O [i.e.N.] '63. (MIRA 17:11)

1. Iz laboratorii eksperimental'noy fiziologii po ozhivleniyu organizma (zav. - prof. V.A. Negovskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Parinym.

SOBOLEVA, V.L.

Antibiotic therapy of whooping cough. Sov. med. 18 no.8:22-24 Ag '54. (MLRA 7:8)

1. Iz infektsionnogo otdela(nauchnyy rukovoditel'-chlen korrespondent Akademii meditsinskikh nauk SSSR prof. A.I.Dobrokhotova) Instituta pediatrii Akademii meditsinskikh nauk SSSR (dir.-prof. M.N.Kazantseva) na baze vtoroy klinicheskoy bol'nitsy imeni Rusakova (glavnyy vrach zasluzhennyy vrach RSFSR V.A.Kruzhkov)

(WHOOPING COUGH, therapy antibiotics) (ANTIBIOTICS, ther. use whooping cough)

S/136/60/000/06/012/026
E073/E435

AUTHOR: Soboleva, V.M.

TITLE: Application of Indium and its Alloys as Semiconductor Materials

PERIODICAL: Tsvetnyye metally, 1960, Nr 6, pp 46-50 (USSR)

ABSTRACT: Published material does not provide sufficient information on the techniques of obtaining indium alloys, particularly for semiconductor use. The author was concerned with the development of the techniques for manufacturing such alloys. About forty different indium-base alloys were prepared with compositions as given in the Table, p 46. As starting materials, indium, gallium, antimony and zinc, all of 99.999% purity, aluminium of 99.996% purity and gold and silver of 99.99% purity were used. Earlier, indium alloys were produced by fusing the individual elements inside evacuated quartz ampoules with charges weighing between 20 and 200 g. Since the required quantities of these materials are continuously increasing, the author experimented with larger charges and teeming the molten material into ingots; this resulted in a better

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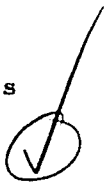
Application of Indium and its Alloys as Semiconductor Materials

distribution of the alloying elements. The results of quantitative spectrum analysis for an In-Ga (0.5% Ga) alloy and for an In-Zn (1% Zn) alloy are entered in the Table, p 47. Of particular interest are In-Sb-Ga alloys (5% Sb and 0.5% Ga) and In-Sb-Au-Ga alloys (5% Sb, 7% Au and 0.5% Ga), which are used as emitters for germanium triodes. For smelting such alloys in ampoules, special equipment was designed. For the purpose of obtaining a finer structure, the melt is subjected to a rotary movement and also an oscillatory movement in the vertical direction whereby the speed of rotation and the frequency of the oscillations are controlled by a laboratory rheostat. A sketch of this equipment is shown in Fig 1. The results of the chemical analysis showed that in the thus produced In-Sb-Ga alloy the antimony distribution is uniform. Fig 2 and 3 show the crystallization curves of the In-Ga (0.5% Ga) and In-Zn (3% Zn) alloys, respectively. Fig 4, 5 and 6 show micro-structure photographs of the produced



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Application of Indium and its Alloys as Semiconductor Materials

In-Sb-Au-Ga alloy (5% Sb, 7% Au and 0.5% Ga).
There are 6 figures and 2 tables.

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SOBOLEVA, V.M.

Preparing sections from indium alloys. Zav.lab. 26 no.3:369-370 '60. (MIRA 13:6)

(Indium alloys--Metallography)

SOBOLEVA, V.M.; LIKHTMAN, A.Ye.

"Micrometallurgy" of alloys for semiconductor devices. TSvet. met. 35 no.9:70-73 S '62. (MIRA 16:1)
(Semiconductors--Analysis)

ROZOVSKAYA, Ye.S.; SIMON, I.B.; VVEDENSKIY, V.P.; SOBOLEVA, V.M.

Synthesis and the pharmacological properties of some salts of bromine derivatives of benzyldimethylethylammonium. Trudy Ukr. nauch.-izzl. inst. eksper. endok. 19:404-417 '64. (MIRA 18:7)

1. Iz otdela khimii gormonov Ukrainskogo instituta eksperimental'noy endokrinologii i kursa farmakologii Khar'kovskogo meditsinskogo stomatologicheskogo instituta.

SOBOLEVA, V.M., vrach (L'vov)

Clinical aspects and diagnosis of glalolithiasis. Probl. chel.-lits. khir. no.1:153-156 '65. (MIRA 18:10)

YAKHNIN, E.Ya.; SOBOLEVA, V.N.

Mineralogical composition of Apt and Alba sediments in the Tuarkyr region. Trudy VSEGEI 109:232-237 '63. (MIRA 17:7)

MAZURKEVICH, Nikolay Stepanovich [Mazurkevych,M.S.]; SOBOLEVA, V.P., red.; MOROZKO, L.G., tekhn. red.

[Maintenance of swine in outdoor runs in summer field bases] Vil'no-vyhul'noe utrymannia svynei v taborakh. Kyiv, Kyivs'ke, obl. knyzhkovo-gazetne vyd-vo, 1963. 16 p. (MIRA 16:10)
(Swine)